

**AERONAUTICAL CHARTING FORUM**  
**Instrument Procedures Group**  
**October 23, 2012**

**HISTORY RECORD**

**FAA Control # 12-02-306**

**Subject:** Class B Airspace Containment of Instrument Approach Procedures

**Background/Discussion:** It was brought to the attention of the Allied Pilots Association (APA) AA Safety Action Program (ASAP) Team that there may be a systemic problem with ensuring Class B Airspace containment for instrument flight procedures. For example, the Miami, Intl. Airport (KMIA) ILS RWY 9 glideslope descends out of Class B airspace for approximately 1 NM before reentering. If glideslope is intercepted at GRITT, aircraft will be below the 3000 foot floor of Class B airspace for approximately one mile before it will re-enter the Class B at the point where the Class B floor becomes 1500 feet. The same situation occurs on the RNAV (GPS) RWY 9 when the pilot departs 3000 at HODLE, which is .5 NM farther away from the 1500 foot Class B floor sector. This will cause a violation of 14 CFR Part 91.131(a)(2) (operation of a turbine aircraft below Class B airspace floor while operating to the primary Class B airport) as well as create a potential midair conflict with aircraft operating under the Class B airspace. It has also been reported that some controllers delay clearances for approach (presumably more for visual approaches) for consideration of the Class B airspace floor, thus causing aircrews to be rushed in descent and aircraft configuration for landing, which results in an unstable approach. We also believe there were similar problems at Phoenix and Las Vegas that have been corrected.

We are also concerned that when this type anomaly occurs, the airspace rulemaking process to amend the Class B area takes approximately two years. The ATO is responsible for controlled airspace designations. Currently FAA Order 8260.19, paragraph 5-7c requires AeroNav Products to notify ATC of the point where an aircraft will descend to an altitude of 1,000 above the surface. Additionally FAA Order JO 7400.2, paragraph 15-2-3c mandates that the Class B vertical limit *"...must encompass, as a minimum, all final approach fixes and minimum altitudes at the final approach fix...."* Precision approaches such as an ILS normally have two final approach fixes (FAFs); the glide slope (GS) intercept point (designated by a lightning bolt symbol on government charts) is the final approach fix for the ILS and, another fix inside this point may be established as the final approach fix for the Localizer (designated as a Maltese Cross on government charts). When the GS intercept altitude is considerably higher than the LOC FAF (in the case of KMIA, 1,500') it will often require the Class B area to be extended beyond the normal range.

**Recommendations:** Recommend that special attention be given to ensure that the glideslope intercept point is included as a final approach fix when considering Class B vertical and lateral limits. When such discrepancies are discovered, corrective Class B airspace action should be expedited on an immediate final rule basis. Notice is unnecessary because such an amendment would be a technical amendment to bring the Class B area into compliance with the intent of the previous Class B major rulemaking.

**Comments:** This recommendation affects FAA Orders 8260.19, *Flight Procedures and Airspace*, and JO 7400.2, *Procedures for Handling Airspace Matters*.

**Submitted by:** FO Lev Prichard  
**Phone:** 214-739-2914  
**E-mail:** lhp4@swbell.net

**Organization:** Allied Pilots Association Safety  
**FAX:** 214-739-2913  
**Date:** 4 Oct 12

MIAMI, FLORIDA

AL-257 (FAA)

12152

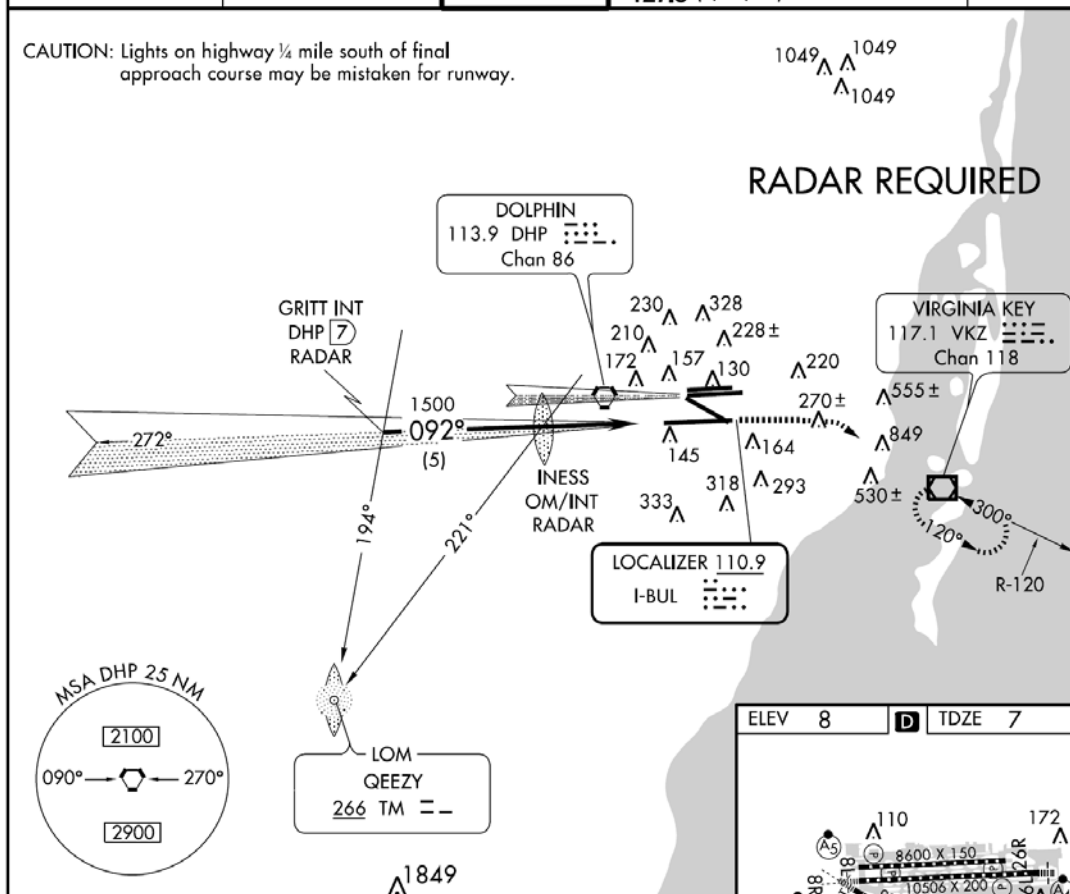
LOC I-BUL <b>110.9</b>	APP CRS <b>092°</b>	Rwy Idg <b>11397</b> TDZE <b>7</b> Apt Elev <b>8</b>
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# ILS or LOC RWY 9 MIAMI INTL (MIA)

<p>Simultaneous approach authorized with ILS or LOC Rwy 8R. For inoperative MALSR, increase S-ILS 9 Cat E visibility to RVR 4000, and S-LOC 9 Cat E visibility to 1½.</p> <p>* Vis Cat A/B/C/D RVR 1800 authorized with the use of FD or AP or HUD to DA.</p>	<p>MALSR</p>	<p>MISSED APPROACH: Climb to 800 then climbing right turn to 3000 direct VKZ VOR/DME and hold.</p>
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<p>ATIS <b>119.15</b></p>	<p>MIAMI APP CON <b>124.85 322.3</b></p>	<p>MIAMI TOWER <b>118.3 256.9</b></p>	<p>GND CON <b>121.8</b> (8L/8R/12/26L/26R) <b>127.5</b> (9/27/30) <b>348.6</b></p>	<p>CLNC DEL <b>135.35</b></p>
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CAUTION: Lights on highway ¼ mile south of final approach course may be mistaken for runway.



<p>GRITT INT DHP 7 RADAR</p> <p>INNESS OM/INT RADAR</p> <p>3000</p> <p>1500</p> <p>092°</p> <p>5 NM</p> <p>4 NM</p> <p>GS 3.00° TCH 55</p>		<p>800 3000 VKZ</p>		<p>ELEV 8 D TDZE 7</p>	
CATEGORY	A	B	C	D	E
S-ILS 9	* 207/24 200 (200-½)				
S-LOC 9	440/24	433 (500-½)	440/40 433 (500-¾)	440/50	433 (500-1)
CIRCLING	NA				
<p>TDZ/CL Rwy 8R</p> <p>REIL Rwy 8L and 26R</p> <p>HIRL all Rwy</p> <p>FAF to MAP 4 NM</p>					
Knots					60 90 120 150 180
Min:Sec					4:00 2:40 2:00 1:36 1:20

MIAMI, FLORIDA  
Amdt 9C 05APR12

25°48'N-80°17'W

MIAMI INTL (MIA)  
ILS or LOC RWY 9

KMIA/MIA  
MIAMI INTL



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30 MAR 12 11-3

MIAMI, FLA  
ILS or LOC Rwy 9

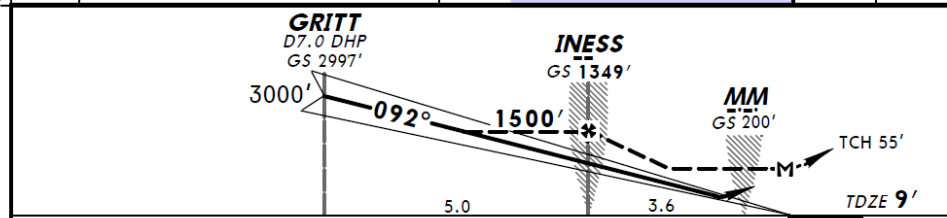
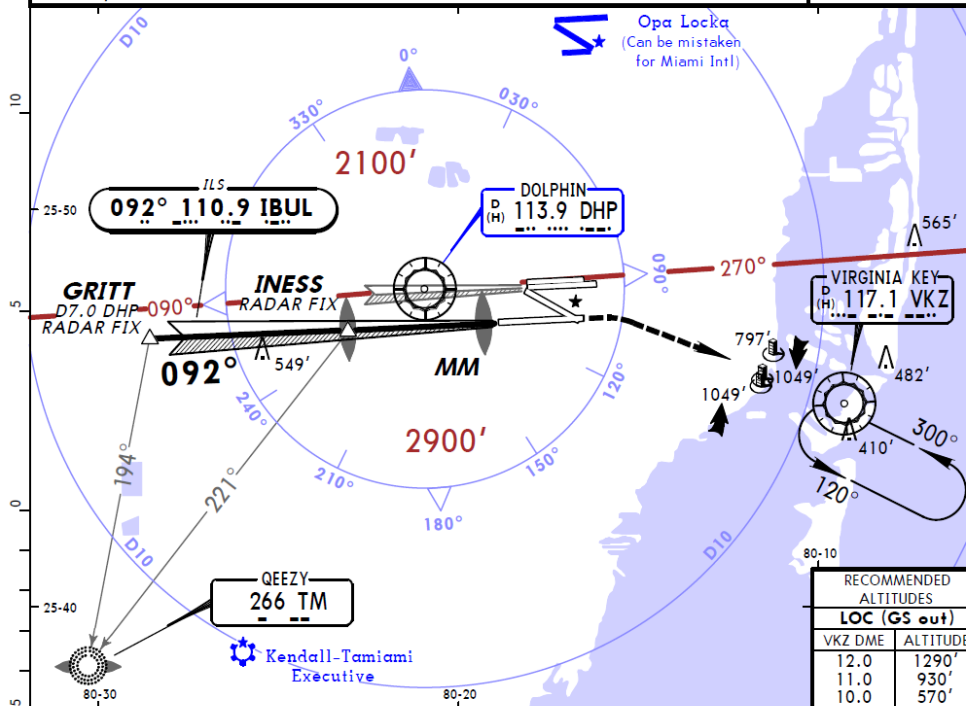
D-ATIS Arrival <b>119.15</b>	MIAMI Approach (R) <b>124.85</b>	MIAMI Tower 270°-089° <b>118.3</b>	090°-269° <b>123.9</b>	Rwys 9, 27, 30 <b>127.5</b>	Ground Rwys 8L/R, 12, 26L/R <b>121.8</b>
LOC IBUL <b>110.9</b>	Final Apch Crs <b>092°</b>	GS INESS <b>1349'</b> (1340')	ILS DA(H) <b>209'</b> (200')	Apt Elev 9' TDZE 9'	

**MISSED APCH:** Climb to 800' then climbing RIGHT turn to 3000' direct VKZ VOR and hold.

Alt Set: INCHES Trans level: FL 180 Trans alt: 18000'

1. Radar required. 2. CAUTION: Lights on highway 1/4 NM south of final approach course may be mistaken for runway. 3. Simultaneous approach authorized with ILS or LOC Rwy 8R.

MSA DHP VOR



Gnd speed-Kts	120	140	160	180					
ILS GS	3.00°	646	753	861	969				
or LOC Descent Angle [3.40°]		722	842	963	1083				
INESS to MAP	4.0	2:00	1:43	1:30	1:20				

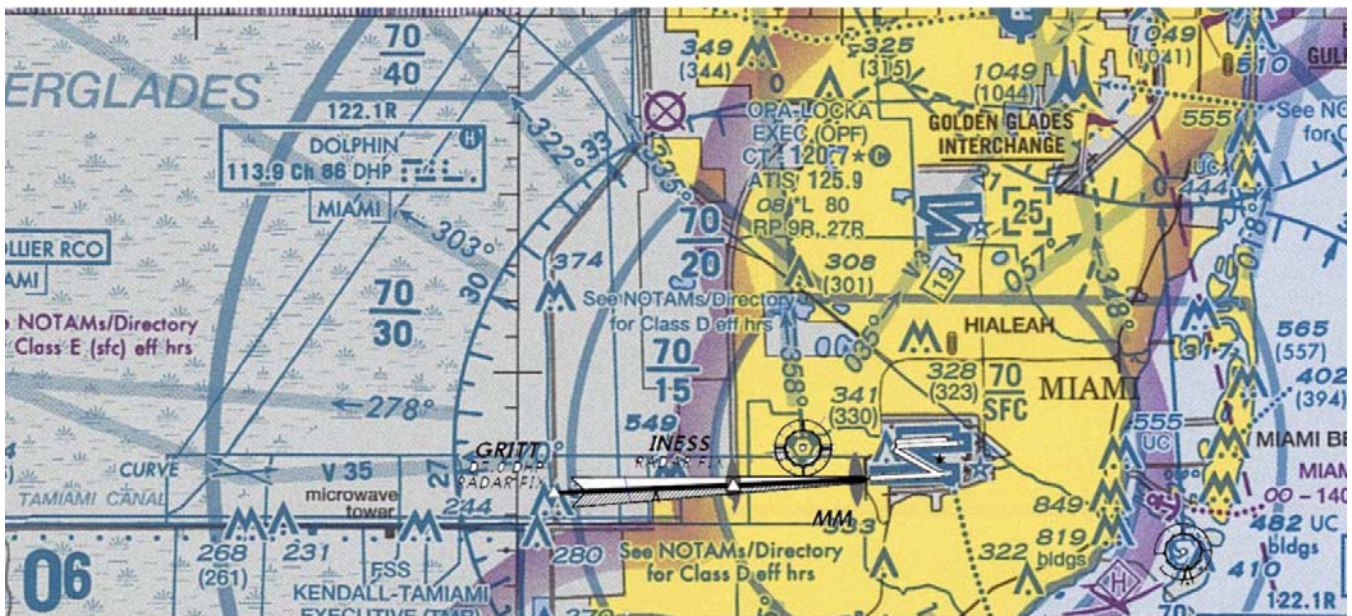
STRAIGHT-IN LANDING RWY9				CIRCLE-TO-LAND	
ILS		LOC (GS out)			
DA(H) <b>209'</b> (200')		MDA(H) <b>440'</b> (431')			
FULL	RAIL or ALS out	RAIL out	ALS out		
C	RVR 24 or 1/2	RVR 40 or 3/4	RVR 40 or 3/4	C	NA
D		RVR 50 or 1	1 1/2	D	

1 RVR 18 with Flight Director or Autopilot or HUD to DA.

CHANGES: Airport elevation, notes, MSA.

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TERPS AMEND 9C 5 APR 2012



**Initial Discussion - Meeting 12-02:** New issue introduced by Lev Prichard on behalf of the Allied Pilots Association, APA. Lev expressed concern that the ILS RWY 9 approach at Miami Int'l (KMIA) allows pilots, when intercepting and flying the glide slope (GS), to descend below the floor of Class B airspace. This causes the pilot to violate 14 CFR Part 91.131(a)(2). Kevin Allen, US Airways, noted that this problem is not isolated to KMIA, but also occurred at Phoenix and Las Vegas. Kevin added that it is concerning that when this type discrepancy is noted and reported, it takes years to amend the Class B airspace to contain the procedures. Gary McMullin, SWA, agreed that this is a nationwide issue as there are more and more problems associated with Class B containment of instrument procedures. He noted that the local ATC facility is the key link in ensuring containment via procedure design or Class B modification. Paul Eure, AJE-31, stated that the FAA Airspace, Regulations, and ATC Procedures Group, AJV-11 is undergoing a complete review of all Class B airspace. Thus far 6 have been modified and 12 others are under review. Bob Lamond, NBAA, stated that airspace re-design is a complicated process and added that he did not support two groups working the same issue. Bob stated that since Class B airspace is a continuing safety issue on the ATPAC agenda, he believes the issue should be expanded within ATPAC to address the APA concerns. Steve Serur, ALPA, noted that the Class B airspace initiative had begun as a corrective action after a 1986 Aero Mexico aircraft accident in Cerritos, California and he believes the issue should be worked through the ACF-IPG as it violates established rules. Bill Hammett, AFS-420 (ISI), agreed with the NBAA representative in that two entities should not be working the same issue and this particular issue should be worked through ATPAC. Airspace within the NAS is under the purview of the ATO, specifically, the Airspace, Regulations, and ATC procedures Group, AJV-11. Currently the Manager of AJV-11 is Gary Norek, who is also the current Acting Executive Director of ATPAC. Having the same person in charge of these two organizations should provide an added benefit in getting expeditious action on the issue. As noted, ATPAC is currently sponsoring a review of all Class B airspace areas. The APA issue should be able to be incorporated in this study or accepted as a separate ATPAC Area of Concern. ATPAC has an assigned membership of 17 organizations, including APA and American Airlines. Bill stated that while he is pleased that APA and others acknowledge the ACF as an organization that achieves results, he also believes that ATPAC can be more effective on this and other issues, especially if encouraged by their membership. Lastly, Bill stated that the current policy in FAA Order JO 7400.2 mandates that the Class B vertical limit "....must

*encompass, as a minimum, all final approach fixes and minimum altitudes at the final approach fix....".*

This policy could not be more clear; however, the applicable offices may need to be reminded that on ILS approaches, there are two final approach fixes (FAFs), one for the ILS and one for the LOC. These points may or may not be co-located as in the case of KMIA. The glide slope intercept point is approximately 5 NM from and 1,500 higher than the designated LOC FAF. This should have been noted by the Service Area Flight Procedures Team and/or the ATC facility during the coordination phase of the approach and fixed prior to publication (either by moving the glide slope intercept point or amending the Class B vertical limit). In short, if the current policy was followed, the situation would not exist. Rick Dunham, AFS-420, asked what should be done in the interim. Gary McMullin responded that a note could be placed on the charts, something to the effect "procedure may exit Class B Airspace." Brad Rush, AJV-3B, spoke against this recommendation, stating that if a chart note were accepted as mitigation, AT would never enforce compliance. No other suggestions were offered. Tom Schneider, AFS-420, as ACF-IPG Chair agreed the issue should be worked through ATPAC and the issue will be closed from further consideration by the ACF-IPG. Tom stated that he will forward a copy of the APA issue and the record of the ACF-IPG discussion to the ATPAC Executive Director and recommended APA (with support of other interested ATPAC members) present the issue as an Area of Concern at the next ATPAC meeting. **ITEM CLOSED.**

**Editor's Post Meeting Note:** *The following quote from Order JO 7400.2 has been added to Change 3 to FAA Order 8260.19 under paragraph 5-8c as an additional reminder: "The Class B vertical limit must encompass, as a minimum, all final approach fixes and minimum altitudes at the final approach fix to include the glideslope intercept point for ILS approach procedures."*

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